UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C., 20460

OCT 5 2017

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ryan Milliken, Owner
Hardway Solutions, LLC, d/b/a Hardway Performance and Hardway Performance Solutions
1490 Highway 98 W
Mary Esther, Florida 32569
Registered Agent for Hardway Solutions, LLC

Re: Notice of Violation of the Clean Air Act

Mr. Milliken:

The United States Environmental Protection Agency has investigated and continues to investigate Hardway Solutions, LLC, d/b/a Hardway Performance and Hardway Performance Solutions ("Hardway Solutions") for compliance with the Clean Air Act ("CAA" or "the Act"), 42 U.S.C. §§ 7401–7671q, and its implementing regulations. As summarized in this Notice of Violation, the EPA has determined that Hardway Solutions: (a) knowingly removed or rendered inoperative elements of design of motor vehicle engines that were installed by the original equipment manufacturer in order to comply with CAA emission standards; and (b) sold parts or components for motor vehicle engines that bypass, defeat, or render inoperative such elements of design, and knew or should have known that these parts or components were offered for sale or installed for such use or put to such use. Therefore, Hardway Solutions has violated Sections 203(a)(3)(A) and (B) of the Act, 42 U.S.C. §§ 7522(a)(3)(A) and (B).

Law Governing Alleged Violations

This Notice of Violation arises under Part A of Title II of the Act, 42 U.S.C. §§ 7521–7554, and the regulations promulgated thereunder. These laws were enacted to reduce air pollution from mobile sources of air pollution. In creating the Act, Congress found, in part, that "the increasing use of motor vehicles . . . has resulted in mounting dangers to the public health and welfare."[1] Congress' purpose in creating the Act, in part, was "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population," and "to initiate and

[1] CAA § 101(a)(2), 42 U.S.C. § 7401(a)(2).

accelerate a national research and development program to achieve the prevention and control of air pollution."[2]

The EPA's allegations here concern parts or components for motor vehicles and engines subject to emission standards.[3] The Act requires the EPA to prescribe and revise, by regulation, standards applicable to the emission of any air pollutant from new motor vehicles or engines that cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare.[4] As required by the Act, the emission standards "reflect the greatest degree of emission reduction achievable through the application of [available] technology."[5] Motor vehicles and engines are subject to specific emission standards for each pollutant, based on a vehicle's or engine's class and model year.[6]

Vehicle and engine manufacturers employ many devices and elements of design to meet emission standards. *Element of design* means "any control system (i.e., computer software, electronic control system, emission control system, computer logic), and/or control system calibrations, and/or the results of systems interaction, and/or hardware items on a motor vehicle or motor vehicle engine."[7] For example, manufacturers employ retarded fuel injection timing as a primary emission control device for emissions of oxides of nitrogen ("NOx"). Manufacturers also employ certain hardware devices as emission control systems to manage and treat exhaust to reduce levels of regulated pollutants from being created or emitted into the ambient air. Such devices include diesel particulate filters ("DPFs"), exhaust gas recirculation ("EGR"), diesel oxidation catalysts ("DOC"), nitrogen oxide absorbing catalysts ("NAC"), and selective catalytic reduction ("SCR"). Modern vehicles and engines are equipped with electronic control modules ("ECMs"). ECMs continuously monitor engine and other operating parameters and control the emission control devices, such as the fueling strategy.

Manufacturers further employ onboard diagnostics, or "OBD," which comprise of systems that monitor components that can affect the emission performance of a motor vehicle, detect problems with the vehicle's emission-related systems that could cause the vehicle to fail to comply with the CAA's emission standards, alert drivers to these problems, and store electronically-generated malfunction information.[8] If a problem is detected, the OBD system illuminates a warning lamp on the vehicle instrument panel to alert the driver. Given these functions, the OBD is part of a motor vehicle's emission control system.

To ensure that every new motor vehicle or engine legally sold, offered for sale, imported, delivered for introduction into commerce, or introduced into commerce in the United States (collectively, "introduced into commerce") satisfies applicable emission standards, the EPA runs a certification program. Under this program, the EPA issues certificates of conformity ("COCs"), thereby qualifying motor vehicles and engines for introduction into commerce.[9] To obtain a COC, an OEM must submit a COC application to

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[2] CAA § 101(b)(1)–(2), 42 U.S.C. § 7401(b)(1)–(2).
[3] *See generally* 40 C.F.R. Part 86, Subpart A (setting emission standards for these categories).
[4] CAA § 202(a)(1) and (3)(B), 42 U.S.C. § 7521(a)(1) and (3)(B).
[5] CAA § 202(a)(3)(A)(i), 42 U.S.C. § 7521(a)(3)(A)(i).
[6] *See, e.g.*, heavy-duty diesel engine emission standards at 40 C.F.R. §§ 86.004-11, 86.007-11, 86.099-11 and light-duty vehicle emission standards at 40 C.F.R. § 86.1811-04. *See also* 40 C.F.R. §§ 86.090-8 (1990 and later model year light-duty vehicles); 86.094-9 (1994 and later model year light-duty trucks); 86.001-9 (2001 and later model year light-duty trucks); 86.004-9 (2004 and later model year light-duty trucks); 86.091-10 (1991 and later model year Otto-cycle heavy-duty engines and vehicles); 86.008-10 (2008 and later model year Otto-cycle heavy-duty engines and vehicles).
[7] 40 C.F.R. § 86.094-2.
[8] *See* CAA § 202(m), 42 U.S.C. § 7521(m), requiring EPA to promulgate regulations requiring OBD systems for motor vehicles after 2007. *See also* 40 C.F.R. §§ 86.005-17, 86.007-17, 86.1806-05, and 86.1806-17.
[9] 40 C.F.R. § 86.007-30.

the EPA for each engine family and each model year in which it intends to manufacture or import motor vehicles or engines for introduction into commerce. The COC application must include, among other things, identification of the covered engine family, a description of the motor vehicle or engine and its emission control systems, all auxiliary emission control devices ("AECDs")[10] and the engine parameters they sense, as well as test results from a test vehicle or engine showing that it satisfies the applicable emission standards.[11]

The Act makes it a violation "for any person to remove or render inoperative any device or element of design installed [by an original equipment manufacturer ("OEM")] on or in a motor vehicle or motor vehicle engine in compliance with regulations under this subchapter prior to its sale and delivery to the ultimate purchaser, or for any person knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser."[12] It is also a violation to cause any of the foregoing acts.[13]

In addition, the Act makes it a violation "for any person to manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this subchapter, and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use."[14] It is also a violation to cause any of the foregoing acts.[15]

Alleged Violations

Based on evidence gathered during an inspection on October 31, 2016, and Hardway Solutions' March 27, 2017, response to EPA's Information Request pursuant to Section 208(a) of the CAA, dated February 8, 2017, the EPA has determined that Hardway Solutions has manufactured, offered for sale, sold, and/or installed from January 1, 2014, to October 31, 2016, products that have a principal effect of altering or bypassing emission control systems or elements of design on motor vehicles or engines, primarily light-duty diesel trucks and engines, manufactured by entities such as FCA US LLC and its predecessors ("FCA"); General Motors Co. ("GM"); and Ford Motor Co. ("Ford"). Hardway Solutions sold three main categories of these "defeat device" products: exhaust emission control delete hardware (sometimes referred to as "straight pipes"); EGR delete hardware; and aftermarket ECM programmers (including hardware commonly referred to as "tuners" and software commonly referred to as "tunes"). EPA's findings regarding Hardway Solutions' sales transactions involving defeat devices between January 1, 2014, to October 31, 2016, are identified in the table below:

[10] An AECD is "any element of design which senses temperature, vehicle speed, engine RPM, transmission gear, manifold vacuum, or any other parameter for the purpose of activating, modulating, delaying, or deactivating the operation of any part of the emission control system." 40 C.F.R. § 86.082-2.
[11] 40 C.F.R. §§ 86.004-21, 86.007-21, 86.094-21, 86.096-21; *see also* EPA, *Advisory Circular Number 24-3: Implementation of Requirements Prohibiting Defeat Devices for On-Highway Heavy-Duty Engines* (Jan. 19, 2001).
[12] CAA § 203(a)(3)(A), 42 U.S.C. § 7522(a)(3)(A).
[13] CAA § 203(a), 42 U.S.C. § 7522(a).
[14] CAA § 203(a)(3)(B), 42 U.S.C. § 7522(a)(3)(B).
[15] CAA § 203(a), 42 U.S.C. § 7522(a).

Defeat Device Product	Effect on Motor Vehicle and Engine Emission Control Systems and Elements of Design	Approximate Quantity of Defeat Device Products Sold
Hardway EFILive Custom Tunes Loaded in an EFILive AutoCal, or V2 FlashScan Tuner	Alter fuel timing maps within engine electronic calibrations and allowing removal of a DOC, DPF, NAC, or SCR system or disabling of an EGR system without illuminating a malfunction indicator lamp ("MIL"), prompting any diagnostic trouble code ("DTC"), or causing any engine derating.	2,645
Hardway EFILive Custom Tunes Sold Via Email	Alter fuel timing maps within engine electronic calibrations and allowing removal of a DOC, DPF, NAC, or SCR system or disabling of an EGR system without illuminating a MIL, prompting any DTC, or causing any engine derating.	1,988
Exhaust Emission Control Delete Hardware	Remove and bypass DOC, DPF, NAC and/or SCR systems.	91
EGR Delete Hardware	EGR system removal and/or bypass.	49
SCT X4 Powerflash tuner (P/N: 7015), SCT SF3 tuner (P/N: 3015),and Livewire tuner (P/N: 5015)	Disable EGR system and OBD oxygen sensors	10
H&S Mini Maxx and XRT Pro Race Tuner	Alter fuel timing maps within engine electronic calibrations and allowing removal of a DOC, DPF, or SCR system or disabling of an EGR system without illuminating a MIL, prompting any DTC, or causing any engine derating.	272
H&S Tuner Unlock	A code that unlocks the tunes that disable emission control devices within the H&S tuners.	103

Defeat Device Product	Effect on Motor Vehicle and Engine Emission Control Systems and Elements of Design	Approximate Quantity of Defeat Device Products Sold
H&S MCC Unlock	A code that allows full functionality of H&S's tuning software called Max Calibration Control ("MCC"). This calibration software can be used to modify engine calibrations, including disabling emission control devices.	974
13+ Cummins Bully Dog GT Tuner (P/N 40420) and Bully Dog Unlock Cable	Products specifically advertised by Hardway Solutions as necessary for using Hardway's custom tunes or tuners on MY 2013 and newer Dodge Ram pickup trucks with the 6.7 liter Cummins engine, as such engines have technology designed to prevent ECM reprogramming and must be disabled or "unlocked" prior to tampering.	352
	TOTAL	**6,484**

Further, EPA finds from its review of Hardway Solutions' records that it has installed defeat devices on motor vehicles on at least ten occasions between January 1, 2014, and October 31, 2016. Invoices included labor charges for such tampering activities as "*Install delete pipe,*" "*Labor to Relocate DPF system,*" and "*REMOVE DEF TANK*[16]." For example, one invoice includes both labor charges for "R&R Exhaust Kit" and sale of a "FloPro" 837NB. The FloPro 837NB is an exhaust system designed to replace the DOC and DPF on 2008-2010 Ford Powerstroke engines.

Hardway Solutions knew or should have known that these products were offered for sale, sold, or installed to bypass, defeat, or render inoperative elements of design that control emissions of regulated air pollutants, based upon Hardway Solutions' status as a custom tune designer, the functions of Hardway Solutions' products, Hardway Solutions' advertisements regarding the products, and EPA's findings during the inspection of Hardway Solutions' facility as discussed below.

Hardway Solutions sold and/or installed aftermarket ECM programmers that rendered inoperative the OEM-certified ECM programming and replaced it with modified programming that altered fuel injection maps and other elements of design that can lead to significant emission increases compared to the OEM certified programming. In addition, the aftermarket ECM programmers sold and/or installed by Hardway Solutions defeat the OEM-certified ECM programming by overriding the OBD notifications required by regulation under the CAA, and allow for the removal of emission control systems or elements of design illuminating a MIL, prompting a DTC, or causing an engine power reduction due to a missing or malfunctioning element of design.

[16] "DEF Tank" refers to an essential component of the SCR system that stores diesel emission fluid, a chemical agent necessary for the SCR's exhaust gas catalyzation process that results in NOx emission reductions.

In addition, Hardway Solutions sold EGR delete hardware designed to replace the EGR valve and cooler systems found on most 2003 and newer diesel engines. This hardware typically includes EGR block off plates and/or intake or exhaust manifolds that do not include an EGR port. Hardway Solutions also sold exhaust delete hardware. The exhaust delete hardware are exhaust systems that do not incorporate exhaust aftertreatment emission control devices and are designed to replace exhaust systems containing DOCs, DPFs, NACs, and SCRs.

Hardway Solutions' advertising on its website www.hardwayperformance.com prominently states for many of its custom tuning products that such products facilitate modification of a diesel truck's exhaust system. For example, the product "10-12 6.7L Cummins EFILive Autocal Package" provides the following statements:

> ***FINALLY! A remote custom tuning package for 2010-2012 Ram Trucks with the 6.7 Cummins.***
>
> *Included with the base package is an EFIBYRAN Autocal Pre-loaded with the calibrations necessary to remotely flash your 2010-2012 Cummins and make the under-hood and/or exhaust modifications YOU WANT to your truck! 2010-2012 6.7 Cummins EFILive Autocal Currently capable of 150 HP and 470TQ gains over stock, quickly switch your truck from zero to hero utilizing our CSP5 tuning.*[17]

During the inspection of Hardway Solutions' facility, EPA inspected customer motor vehicles in the process of being serviced and the associated documentation regarding such vehicles. Among the observations made and information gathered during the inspection of such motor vehicles being serviced:

- A Chrysler RAM 2500 truck (VIN 3D7UT2CL5BG629347) with a 2012 model year 6.7-liter Cummins diesel engine with a missing EGR system, and its DPF and DOC removed and replaced by a straight pipe. The truck had a Texas license plate. As part of an interview with one of Hardway Performance's owners during the inspection, Ryan Milliken, Mr. Milliken told the inspectors that, with respect to this truck, he has had to redesign the calibration and EGR, DOC, DPF, and SCR all must be disabled in calibration.

- A GM Sierra truck (VIN 1GT120C80EF178351) with a 2014 model year 6.6-liter General Motors diesel engine for which there was a written estimate for installation of a DPF and DOC replacement exhaust pipe and installation of a Hardway custom tune. The truck had a Florida license plate.

- A Chrysler RAM pickup (VIN 3C6UD5GL8CG142834) with 2012 model year 6.7 liter Cummins diesel engine with no EGR cooler, an intake manifold replaced with one that does not contain an EGR port, DPF and DOC missing and replaced with a straight exhaust pipe. The truck had a Texas license plate.

The information gathered during the inspection clearly support the finding that Hardway Solutions knew or should have known its sale and installation of defeat devices defeat, bypass or render inoperative emission control systems of motor vehicles and engines.

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[17] Webpage https://hardwayperformance.com/tuning/10-12-6-7l-cummins-custom-tuning-package.html (Visited June 5, 2017).

Furthermore, Hardway Solutions knew or should have known that these defeat device products were offered for sale or installed on "motor vehicles" or "motor vehicle engines." Many defeat device products sold or offered for sale by Hardway Solutions were designed and marketed for use on specific makes and models of FCA, GM, or Ford motor vehicles or engines.[18] FCA, GM, or Ford sought and obtained COCs from the EPA for these motor vehicles or engines. This certification unequivocally demonstrates that these vehicles and engines are "motor vehicles" and "motor vehicle engines" under the Act.

Enforcement

The EPA may bring an enforcement action for these violations under its administrative authority or by referring this matter to the United States Department of Justice with a recommendation that a civil complaint be filed in federal district court.[19] Persons violating Sections 203(a)(3)(A) or (B) of the Act, 42 U.S.C. §§ 7522(a)(3)(A) or (B), are subject to an injunction under Section 204 of the Act, 42 U.S.C. § 7523, and a civil penalty of up to $3,750 for each violation that occurred prior to November 2, 2015, and up to $4,527 for each violation that occurred on or after November 2, 2015.[20]

The EPA is available to discuss this matter with you in further detail upon your request. Please contact Mark J. Palermo, the EPA attorney assigned to this matter, within 14 days of receipt of this Notice of Violation. Mr. Palermo can be reached at (202) 564-8894 or Palermo.Mark@epa.gov.

Sincerely,

Phillip A. Brooks
Director
Air Enforcement Division
Office of Civil Enforcement

cc: Stewart D. Cables, Esq., Partner
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[18] Cummins engines were used in Dodge brand motor vehicles manufactured by FCA.
[19] CAA §§ 204, 205, 42 U.S.C. §§ 7523, 7524.
[20] CAA § 205(a), 42 U.S.C. § 7524(a); 40 C.F.R. § 19.4.